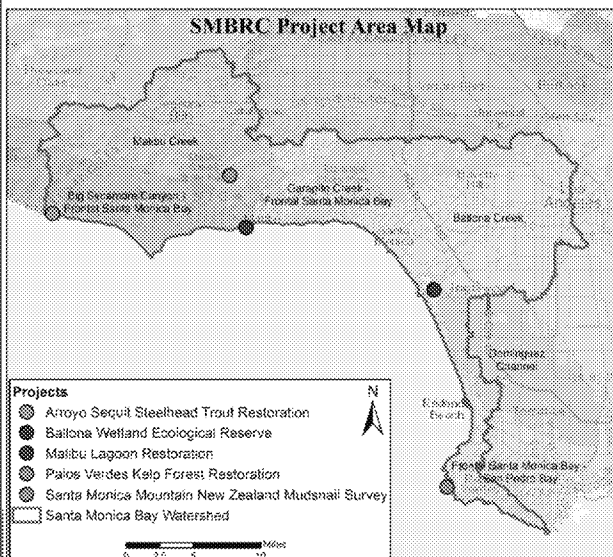


Santa Monica Bay National Estuary Program



Formed in 1988

First CCMP approved in 1995

Management: Santa Monica Bay
Restoration Commission-The Bay
Foundation

Governing Board: decision-making body
➤ comprised of locals, state, feds, dischargers,
nonprofits. EPA is a nonvoting member.

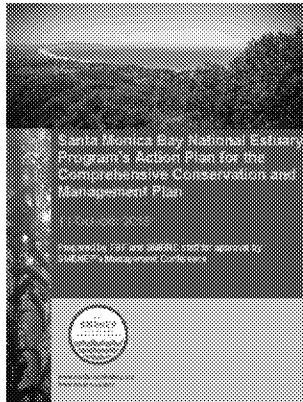
Program Evaluation- June 2019

-Part of this first generation of NEPs to be approved.

- the two largest watersheds are Malibu Creek to the north (west) and Ballona Creek to the south. The Malibu Creek area contains mostly undeveloped mountain areas, large acreage residential properties and many natural stream reaches while Ballona Creek is predominantly channelized, and highly developed with both residential and commercial properties. It contains Ballona wetlands, one of the last remaining coastal wetlands in LA County. You've heard from particularly vocal stakeholders from this area.

-you can see examples of some of the NEP's project. I will touch on just a couple of these during my presentation.

Santa Monica Bay National Estuary Program Comprehensive Conservation & Management Plan



First CCMP approved in 1995- primarily focused on water quality, stormwater, POTWs, nonpoint sources, human health

2018 CCMP Goals

Protect, enhance, and improve ecosystems of Santa Monica Bay and its watersheds

Improve water availability

Enhance socioeconomic benefits to the public

Enhance public engagement and education

Mitigate impacts and increase resiliency to climate change

Improve monitoring and ability to assess effectiveness of management actions

Upcoming Approvals

-NEP governing board: December 2019

-EPA R9 and HQ: concurrence role

44 actions

First ccmp was primarily focused on improving water quality

New 2018 CCMP action plan is primarily focused on restoration, coastal resiliency, and incorporates climate change considerations

Captures work of NEP staff and their partners

Santa Monica Bay Watershed— Nutrients

- Primary sources to SMB: POTWs (Hyperion and LA County's Joint Water Pollution Control Plant), septic systems (Malibu) and residential inputs (fertilizers)

- Mostly addressed through plant upgrades, behavior change

Malibu Creek story

- Nutrient TMDL (2003, 2013)
- Upper Malibu Creek primary sources of nutrients was horse facilities and Tapia water treatment plant → algal blooms
 - Outreach and restricting Tapia discharges mostly addressed nutrients issue.
- Lower Malibu Creek area primarily on septic
 - Malibu Civic Center Water Treatment Facility online Fall 2018
 - Phase 1- treating commercial entities
 - Will cover residential areas by 2024

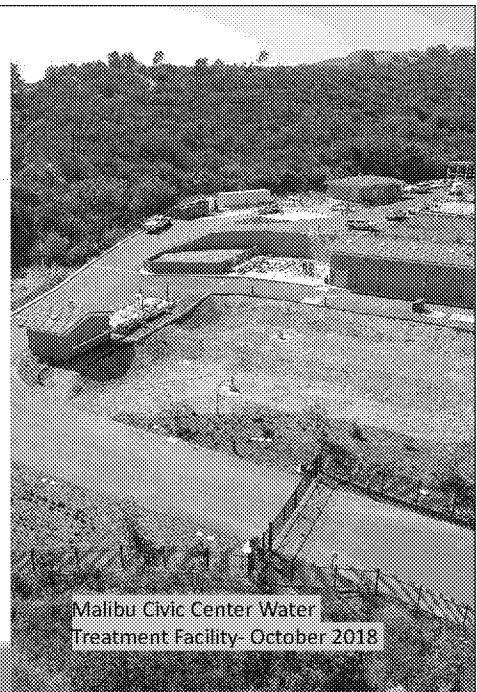


Photo: <https://www.malibucity.org/837/Civic-Center-Water-Treatment-Facility>

Groundbreaking ceremony 2016: <https://www.youtube.com/watch?v=yxJ1h2X8txM&feature=youtu.be>

We know nutrients is a priority and want to provide background so you have context for the DD's meeting.

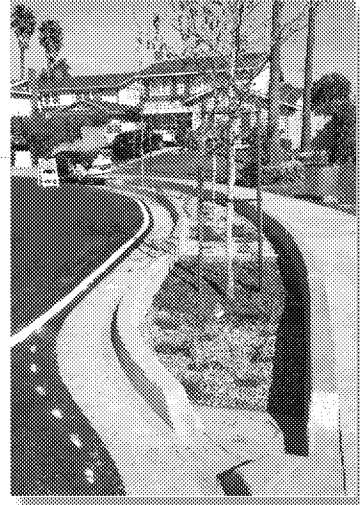
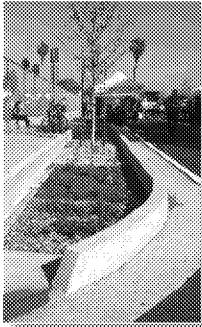
Identified in as a priority water quality issue in the 2008 version of the CCMP. " Decrease nutrient loads to Malibu Creek, from both point and nonpoint sources to eliminate dissolved oxygen (DO) and algal impairments."

NEPs role for this story- primarily through partners such as heal the Bay, Waterkeeper, LA regional water quality control board

Issues in upper watershed mostly addressed. No issues in last ~10 years

Ephemeral streams more sensitive to nutrient inputs Need more restrictive limits.

Santa Monica Bay National Estuary Program Green Infrastructure



- Mountains Recreation and Conservation Authority's Milton Green Street project installed 14 Vegetated Stormwater Curb Extensions adjacent to Ballona Creek to capture and treat runoff (completed in 2018)

This SMBRC-managed program provides funding for projects including coastal watershed contamination prevention and coastal and marine habitat restoration.

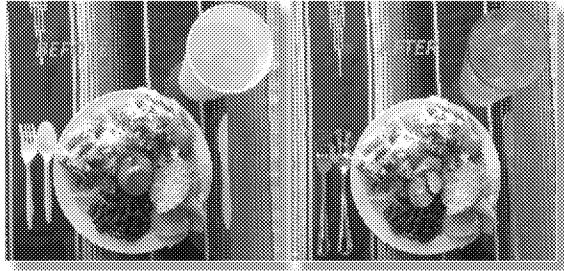
One example of several GI projects funded with state prop money set aside for the commission.

Santa Monica Bay National Estuary Program Marine Debris- Working with Restaurants

CLEAN BAY CERTIFIED



RETHINK DISPOSABLE LA



- Four participating restaurants
- Will reduce single-use disposables by almost 250,000 pieces every year
- Each restaurant will prevent over 2,500 lbs of waste and will save \$2,000 per year (annually)

There are Trash TMDLs- Ballona and Malibu Creeks and Santa Monica Bay.

Santa Monica Bay Debris TMDL requirements will not be revised to align with the more limited scope of the statewide Trash Amendments. ay Debris TMDL became effective on March 20, 2012.

The NEP is addressing Marine debris on multiple levels.

They have two programs working with restaurants – clean Bay certified which is a partnership with city stormwater programs to help restaurants implement waste management BMPs. This past year they received money from EPA HQ to partner with clean water action to pilot a source reduction and behavior change project called rethink disposable.

The NEP has funded the city of Inglewood, rolling Hills, and Palos Verdes estates to purchase 5 mm catch basin inserts.

The NEPs 2018 CCMP action plan has three actions that address Marine debris

CCMP Action plan

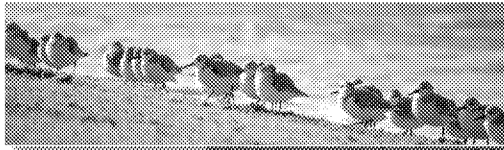
ACTION #33 – MONITOR MICROPLASTICS AND OTHER MARINE DEBRIS

ACTION #40 – INFORM NON-POINT SOURCE POLLUTION Action: Research and inform best management and pollution reduction practices to address non-point source pollution and facilitate reduction Long-term Environmental Result(s): Assist in achieving constituent percentage load reduction targets for waterbodies in the Bay according to TMDL compliance timeline

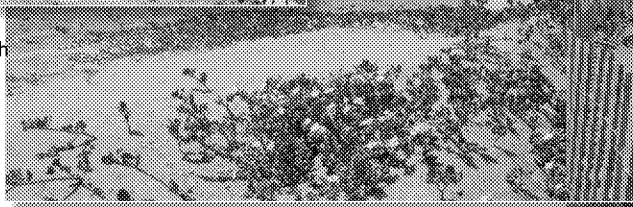
ACTION #32 – REDUCE MARINE DEBRIS

NEP partners such as the city of Malibu have implemented straw bans

Santa Monica Bay National Estuary Program Coastal Resilience



Santa Monica Beach
Restoration Pilot
Project



Restoring beach, dune, and nearshore eelgrass habitats in the NEP study area to improve coastal resilience.

These pictures are from the Santa Monica beach restoration pilot project. This is a partnership between the NEP, city of Santa Monica, and LA beaches and harbors.

This is a lowtech, multi-benefit project, benefiting habit and people.

Staff installed fencing around a 2 acre parcel seeded over 40,000 seeds. Over two years approximately 1 m of sand has accumulated and plants are growing. Plus the endangered snowy plover is using the site. People are still able to access the beach. This project has been touted as a success. Cities are knocking on the NEPs door saying "when can I have one." And three more projects are in the works,

Began outreach efforts and permitting for Malibu Living Shoreline Project

Applied for and received SCC funding for the Los Angeles Living Shoreline Project

Developed partnerships and initiated planning for the Manhattan Beach Dune Restoration Project

Santa Monica Bay National Estuary Program- Kelp Forest Restoration

Commercial fishermen and TBF scientists restore and monitor rocky reefs in the Santa Monica Bay, respectively, as they are transformed from urchin barrens to kelp forests.



- In 2018, an additional 3.9 acres of kelp forest have been restored for a total of 46.9 acres since the project began in 2013
- Pre- and post-restoration monitoring continues across restoration sites

You may remember this project when the Santa Monica Bay NEP staff came to visit two or three years ago. This is a really exciting project primarily happening on the Palos Verdes shelf. The kelp forest, which provides habitat for the life as well as benefits such as wave attenuation, is being decimated by purple sea urchins, with no commercial value. The NEP partnered with commercial fishermen to basically smash purple sea urchins to restore kelp forest.